



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 09/091,735 | 06/24/98 | BRAMHILL | I 36-1230 |

NIXON & VANDERHYE
1100 NORTH GLEBE ROAD
8TH FLOOR
ARLINGTON VA 22201-4714

LM02/1222

EXAMINER

NGUYEN, C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2764

DATE MAILED:

12/22/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/091,735

Applicant(s)
Bramhill et al.

Examiner
Cuong H. Nguyen

Group Art Unit
2764



☒ Responsive to communication(s) filed on the priority paper (PCT/DO/EO/903) received on 09/07/1999.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-27 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-27 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Serial Number: 09/091,735
Art Unit: 2764

DETAILED ACTION

1. This Office Action is the answer to the communication received on 09/07/99 (PCT/DO/EO/903).
2. Claims 1-27 are pending in this application.

Drawings

3. This application has been filed with 8 sheets of formal drawings which are acceptable by the draftsman.

The following rejections are based on the examiner's best interpretation of the claims.

4. *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-21, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

As per claim 19: "A server configured to perform a method as claimed in claim 1".

As per claim 20: "Initiation by the client, of the downloading of copy protected data by a method according to claim 1".

09/091,735
Art Unit 2764

As per claim 21: "A copy protected data stored on the client by a method according to claim 1".

As per claim 27: "A client configured to perform a method as claimed in claim 22".

These above claims are unclear and do not adequately define the technical features of the subject matter to be protected, such that no meaningful opinion can be formed on the non-obviousness of the claimed subject matter. A claim may contain a reference to another claim even if it is not a dependent claim as defined in 35 U.S.C. rules. One example of this is a claim referring to a claim of a different category (e.g., "Apparatus for carrying out the process of Claim 1...", or "Process for the manufacture of the product of Claim 1..."). In such case it should be clear to which extent the claim containing the reference necessarily involves all the features of the claim referred to and to which extent it does not. In general, the fact that the claim referred to contains novel and inventive matter does not necessarily imply that the same is also true of the independent claim containing the reference. Moreover, although the respective category of claim 19 is partially not clear, it is held that the present formulation of this claim does not precisely define limitations of the claimed server, initiation, copy protected data and client, respectively, because it contains solely a vague reference to the method claims. For

09/091,735
Art Unit 2764

example, Claim 19 ("server configured to perform a method...") must be understood as covering in effect any server computer suitable for performing the method, which is not a sufficient definition.

As to claim 20, it is not clear whether that claim ("Initiation...") is directed to a "Method for downloading by the client ..." in which case claim 20 is redundant with claims 22-26, or

- to the "Use of the client", in that case it is noted that the client itself is not defined by any explicit features, but only by reference to the method claim; the "reference of reference" renders the subject matter of claim 20 unclear.

Claim 19 is not clear, because the mere formulation "configured to perform a method as claimed ..." does not suffice to define which technical features must be provided to enable the server/client to perform the respective method.

Claim 21 is not clear, because its introductory statement is directed to "copy protected data", which amounts to claim protection for the content of information rather than for the physical entity (server, client) or the activity (method of copy protecting or of downloading copy-protected data) specially disclosed in the description.

Claim Rejections - 35 USC § 103

09/091,735
Art Unit 2764

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. §103(a) as being unpatentable over Yourdon, in view of Dean et al., Wobber et al. (U.S. Pat. 5,235,642), and further in view of Richardson (PCT WO-A-9407204).

Yourdon suggests ideas of dealing about security on the Internet (see Yourdon pg. 28, cols.1-2 about **Security**), he submits that applications should ensure "secure access to functionality and data, as well as secure transmission of data across the Internet". Adding digital signatures to applets is contemplated, such that a user can be sure of the source and origin of a downloaded applets. As typical for a client server application, a password may be asked "to determine the end user's authorization to invoke certain functionalities of access certain data", and "the application will interact with the browser to encrypt/decrypt transmissions between the client and the server". He further proposes to integrate encryption packages like PGP

09/091,735
Art Unit 2764

into Internet applications and achieve higher security with a public key password system.

Dean et al. contribute ideas about security issues raised in Web browsers such as HotJava and Netscape by server supplied code constituted by Java applets downloaded to and run inside the Web browsers. "In Netscape, Java applets can name only those functions and variables explicitly exported to the Java subsystem". They further suggest that Java would be more secure if encryption was used.

Both Yourdon and Dean et al. talk about encryption, and hashing is known in the art as a similar security measure ensuring integrity of data. Yourdon also suggests hashing by proposing to add signatures to information downloaded from the Web such that the receiving side can be sure of its source and origin, thus of its integrity.

Both Yourdon and Dean et al. suggests method and systems for ensuring security of functionality and data in a client-server environment - in particular the Internet. However they do not directly address the specific problem of protecting from copying data, & authentication which have been downloaded from a server to a client, nor its solution as in claim 1.

Wobber et al. proposes to achieve access control using copies of clients credentials cached at the server for future use. The security system includes a computer at each node of the

09/091,735
Art Unit 2764

distributed system with a trusted computing base that includes an authentication agent for authenticating requests received from principals at other nodes in the system. Requests are transmitted to servers as messages that include a first identifier (i.e. Auth ID) provided by the requester and a second identifier (called the subchannel value) provided by the requester and a second identifier (called the subchannel value) provided by the authentication agent of the requester node. Each server process has an associated local cache that identifies requesters whose previous request messages have been authenticated. When a request is received, the server checks the request's two identifiers against the entries in its local cache. If there is a match, the request is known to be authentic without having to obtain authentication from the requester's node.

Nevertheless, it is held that one with skills in the art would need no inventive activity to infer from the general teachings of Yourdon ("to determine the end user's authorization to invoke certain functionalities of access certain data", and Dean et al. ("applets can name only those functions and variables explicitly exported to the Java sub-system", at least when taken in combination, that a solution consists in selectively controlling copying functions of the client in respect of the downloaded data, hence arriving at the subject matter of claim 1.

09/091,735
Art Unit 2764

As per claims 5-6, 17: Yourdon, Richardson, and Wobber et al. also teaches about password, public key, password system that claimed (in claims 5, 6, 17). Therefore, the same reasoning applies for identifying/authorizing/registering a client to a server.

As per claims 7-8: Gosling (EP 0718761 A1) also discloses the downloading of a program. This feature is well-known in the art.

As per claims 9-16: Bender et al. also disclose about steganographically marking data (claim 16); this feature is also well-known in the art. The Official Notice is taken that the feature of claims 9-13, and the use of a cryptographic key are well-known in the art.

Conclusion

8. Claims 1-27 are rejected.
9. The attached references are considered pertinent to applicant's disclosure.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Cuong H. Nguyen, whose telephone number is (703)305-4553. The examiner can normally be reached on Monday-Friday from 7:00 AM-4:30 PM.

09/091,735
Art Unit 2764

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell, can be reached on (703)305-9768.

Any response to this action should be mailed to:

Box Issue Fee Amendments
Commissioner of Patents and Trademarks
c/o Technology Center 2700
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications
intended for entry)

Or:

(703) 305-0040 (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)305-3900.

Cuong H. Nguyen
Dec. 17, 1999



James P. Trammell
Supervisory Patent Examiner
Technology Center 2700